What is claimed is:

1. A sound radiating device comprising:

a frame having an interior surface with a side portion extending upward from, and surrounding, said interior surface, said side portion terminating in an exterior edge a uniform height above said interior surface and having a predetermined size and shape with said side portion defining a first connection point spaced therearound that is inward and apart from said exterior edge;

a substantially stiff part having an outer edge, a top surface and a bottom surface with said outer edge being substantially the same shape as, and a smaller size than that defined by the exterior edge of the frame, with said bottom surface defining a second connection point therearound;

a flexible surround connected around and between the exterior edge of the frame and the outer edge of the substantially stiff part with the surround being less stiff than said stiff part;

a third connection point defined by said interior surface of said frame inward from said side portion and encircling a center of said frame with said third connection point in substantially a same horizontal plane with said first connection point;

a first resilient spider portion connected between said first and second connection points; and

a second resilient spider portion connected between said second and third connection points;

wherein said second connection point is substantially midway between said first and third connection points, and in substantially the same horizontal plane as said first and third connection points when said stiff part is in a static position as supported by said surround.

2. The sound radiating device of claim 1 wherein:

the first spider portion and the second spider portion each have concentric

alternating ridges and valleys; and

both of the first spider portion and the second spider portion are connected to the second connection point in a valley of the spider portion.

3. The sound radiating device of claim 1 wherein:

the first spider portion is a first spider; and

the second spider portion is a second spider.

4. The sound radiating device is claim 1 wherein the first spider portion and the second spider portion are portions of a one piece spider.

5. The sound radiating device of claim 1 wherein a horizontal component of a first force exerted on the first spider portion in a first direction and a horizontal component of a second force exerted on the second spider portion in a second direction are in opposite directions and substantially equal to each other to cancel a horizontal force of the second connection point on the same side of the center of the frame between the first connection point and the second connection point at each radial around the frame.

6. The sound radiating device of claim 5 wherein the sum of the vertical components of the first force and second force is equal to, and in the opposite direction of, a vertical force exerted on the stiff part.

7. The sound radiating device of claim 1 further comprising:

a bobbin having a first end and a second end with the first end attached at the center of the bottom side of the flat center section of the stiff part;

a voice coil wound on the bobbin near the second end; and

a magnet assembly mounted centrally to the interior surface of the frame with the voice coil of the second end of the bobbin positioned to interact with the magnet

assembly when an electrical signal is applied to the voice coil, wherein a top edge of the magnet assembly furthest from a center of the bobbin and the interior surface of the frame defines the third connection point.

8. The sound radiating device of claim 7 wherein a horizontal component of a first force exerted on the first spider portion in a first direction and a horizontal component of a second force exerted on the second spider portion in a second direction are in opposite directions and substantially equal to each other to cancel a horizontal force of the second connection point on the same side of the center of the frame between the first connection point and the second connection point at each radial around the frame.

9. The sound radiating device of claim 8 wherein the sum of the vertical components of the first force and second force is equal to, and in the opposite direction of, a vertical force exerted on the stiff part.

10. The sound radiating device of claim 1 wherein said stiff part has a substantially flat center section on both the top surface and the bottom surface with a "V" shaped groove opening to the top surface and surrounding said flat center section with the bottom point of said "V" shaped groove on the bottom surface defining the second connection point.

11. The sound radiating device of claim 1 wherein said stiff part is substantially flat on both the top surface and the bottom surface with a ring concentric with a center of the stiff part that extends downward from the bottom surface of the stiff part with the second connection point defined by an edge of the ring furthest from the bottom surface of the stiff part.

12. The sound radiating device of claim 11 further comprising:

a bobbin having a first end and a second end with the first end attached at the center of the bottom side of the stiff part;

a voice coil wound on the bobbin near the second end; and

a magnet assembly mounted centrally to the interior surface of the frame with the voice coil on the second end of the bobbin positioned to interact with the magnet assembly when an electrical signal is applied to the voice coil, wherein a top edge of the magnet assembly furthest from a center of the bobbin and the interior surface of the frame defines the third connection point.

13. The sound radiating device of claim 1 wherein the stiff part includes a concave cone with a ring concentric with a center of the cone that extends downward from the bottom surface of the cone to a point below a deepest point of the cone and with the second connection point defined by an edge of the ring furthest from the bottom surface of the cone.

14. The sound radiating device of claim 13 further comprising:

a bobbin having a first end and a second end with the first end attached at the center of the bottom side of the cone;

a voice coil wound on the bobbin near the second end; and

a magnet assembly mounted centrally to the interior surface of the frame with the voice coil on the second end of the bobbin positioned to interact with the magnet assembly when an electrical signal is applied to the voice coil, wherein a top edge of the magnet assembly furthest from a center of the bobbin and the interior surface of the frame below the deepest point of the cone defines the third connection point.

15. The sound radiating device of claim 13 wherein the cone includes an outer cone section between the surround and the ring, and an inner cone section extending toward the center of the basket from the ring.

16. The sound radiating device of claim 1 wherein the stiff part includes a concave cone with open center hole therethrough with the second connection point defined by an edge of the open center hole of the cone.

17. The sound radiating device of claim 16 further comprising:

a bobbin having a first end and a second end with the first end attached the edge of the open center hole of the cone;

a voice coil wound on the bobbin near the second end; and

a magnet assembly mounted centrally to the interior surface of the frame with the voice coil on the second end of the bobbin positioned to interact with the magnet assembly when an electrical signal is applied to the voice coil, wherein a top edge of the magnet assembly interior to a center of the bobbin and the interior surface of the frame defines the third connection point.

18. A method of minimizing flexure of a stiff part of a radiating device during operation, the radiating device including a frame having an interior surface with a side portion extending upward from, and surrounding, said interior surface, said side portion terminating in an exterior edge a uniform height above said interior surface and having a predetermined size and shape, the stiff part having an outer edge, a top surface and a bottom surface with said outer edge being substantially the same shape as, and a smaller size than that defined by the exterior edge of the frame, and a flexible surround connected around and between the exterior edge of the frame and the outer edge of the stiff part, the method comprising:

a. providing a first connection point within the frame on, and around, the side portion spaced apart a uniform distance from the exterior edge of the frame;

b. providing a second connection point on, and around, the bottom surface of the stiff part concentric with a center of the stiff part;

c. providing a third connection point affixed to the interior surface of

the frame inward from the side portion and encircling a center of the frame with the third connection point in substantially a same horizontal plane with the first connection point;

d. connecting a first resilient spider portion between the first and second connection points; and

e. connecting a second resilient spider portion between said second and third connection points;

wherein the second connection point is substantially midway between the first and third connection points, and in substantially the same horizontal plane as the first and third connection points when the stiff part is in a static position as supported by the surround.

19. the method of claim 18 wherein a horizontal component of a first force exerted on the first spider portion in a first direction and a horizontal component of a second force exerted on the second spider portion in a second direction are in opposite directions and substantially equal to each other to cancel a horizontal force of the second connection point on the same side of the center of the frame between the first connection point and the second connection point radially around the frame to minimize flexure of the stiff part in all positions vertically.

20. The method of claim 19 wherein the sum of the vertical components of the first force and second force is equal to, and in the opposite direction of, a vertical force exerted on the stiff part in all positions vertically.

21. A method of minimizing flexure of a stiff part of a radiating device during operation, the radiating device including a frame having an interior surface with a side portion extending upward from, and surrounding, said interior surface, said side portion terminating in an exterior edge a uniform height above said interior surface and having a predetermined size and shape, the stiff part having an outer edge, a top surface and

a bottom surface with said outer edge being substantially the same shape as, and a smaller size than that defined by the exterior edge of the frame, a flexible surround connected around and between the exterior edge of the frame and the outer edge of the stiff part, a bobbin having a first end and a second end with the first end attached at the center of the bottom side of stiff part, a voice coil wound on the bobbin near the second end, and a magnet assembly mounted centrally to the interior surface of the frame with the voice coil of the second end of the bobbin positioned to interact with the magnet assembly when an electrical signal is applied to the voice coil, the method comprising:

a. providing a first connection point within the frame on, and around, the side portion spaced apart a uniform distance from the exterior edge of the frame;

b. providing a second connection point on, and around, a top edge of the magnet assembly furthest from a center of the bobbin and the interior surface of the frame;

c. providing a third connection point affixed to the interior surface of the frame inward from the side portion and encircling a center of the frame with the third connection point in substantially a same horizontal plane with the first connection point;

d. connecting a first resilient spider portion between the first and second connection points; and

e. connecting a second resilient spider portion between said second and third connection points;

wherein the second connection point is substantially midway between the first and third connection points, and in substantially the same horizontal plane as the first and third connection points when the stiff part is in a static position as supported by the surround.

22. the method of claim 21 wherein a horizontal component of a first force

exerted on the first spider portion in a first direction and a horizontal component of a second force exerted on the second spider portion in a second direction are in opposite directions and substantially equal to each other to cancel a horizontal force of the second connection point on the same side of the center of the frame between the first connection point and the second connection point radially around the frame to minimize flexure of the stiff part in all positions vertically.

23. The method of claim 22 wherein the sum of the vertical components of the first force and second force is equal to, and in the opposite direction of, a vertical force exerted on the stiff part in all positions vertically.